| ••• | <br><b>.</b> | laims |  |
|-----|--------------|-------|--|
|     |              |       |  |

| Appl | ication | Contro | l No. |
|------|---------|--------|-------|
|------|---------|--------|-------|

Applicant(s)/Patent under Reexamination

10/001,256

WATANABE ET AL.

Examiner

Art Unit

Callie E. Shosho

1714

| 1  | Rejected |
|----|----------|
| 11 | Allowed  |

| _ | (Through numeral)<br>Cancelled |
|---|--------------------------------|
| ÷ | Restricted                     |

| N | Non-Elected  |
|---|--------------|
| 1 | Interference |

| A | Appeal   |
|---|----------|
| 0 | Objected |

| Cla           | aim                    | Date   |                |  |  |   | .            | Claim Date |          |          |        |          |          |               |          |          | CI  | aim      | Date          |          |          |    |             |          |          |          |          |          |          |          |          |                |                |
|---------------|------------------------|--|----------------|--|--|---|--------------|------------|----------|----------|--------|----------|----------|---------------|----------|----------|---|----------|---------------|----------|----------|----|-------------|----------|----------|----------|----------|----------|----------|----------|----------|----------------|----------------|
| <del>`</del>  | 1                      | ·  |                |  |  |   |              |            | T        |          | $\neg$ |          | 1        | <del>-~</del> |          |          |   |          |               |          |          |    | $\neg \neg$ | $\vdash$ |          |          |          |          |          |          |          |                |                |
| Final         | Original               | 3/11/07  |                |  |  |   |              |            |          |          |        | Final    | Original |               |          |          |   |          |               |          |          |    | Final       | Original |          |          |          |          |          |          |          |                |                |
|               | 1                      |  |                | $\vdash$   |  |   |              | $\vdash$   | Н        |          |        |          | 51       | $\vdash$      | $\vdash$ | $\dashv$ | $\dashv$  | +        | +             | $\dashv$ | +        | 1  |             | 101      | _        |          | Н        | _        |          |          | $\vdash$ | $\dashv$       | $\vdash$       |
| <del></del>   | V                      | ┝  | -              |  |  |   | <del> </del> | ⊨          | $\vdash$ | _        |        |          | 52       | Н             | $\vdash$ | +        | +   | +        | -             | $\dashv$ | -        | ┨  |             | 102      |          | -        | $\vdash$ |          | $\dashv$ | -        |          | _              | -              |
|               | × ×                    | ⊢  | -              | ├  |  | -   | -            | -          | Н        |          |        |          | 53       | Н             | -        | +        | +   |          | +             | -        |          | -  | -           | 103      |          | _        | $\vdash$ |          | -        | ш        | -        |                | $\vdash$       |
|               | <b>9</b><br><b>4</b> ) | ٠,   | <u> </u>       | <u> </u>   | $\vdash$   | H   | -            | -          | -        | _        |        |          |          |               |          | -        | -+  |          | +             | +        | +        | 4  | <u> </u>    |          |          |          |          |          |          |          |          | $\dashv$       | ш              |
|               |                        | ĮΛ   |                | _  | <u> </u>   | _   | ┝            | ┡          | Н        | _        |        |          | 54       | _             | -        | _        | 4   | _        |               | -        |          | 4  |             | 104      |          |          |          |          |          |          | $\dashv$ | _              | $\vdash$       |
|               | 5                      | √  | _              | <u> </u>   | _  |   | _            | L          |          |          |        |          | 55       | Ш             |          | 4        | 4   | _        | _             | 4        | $\perp$  | 4  |             | 105      |          |          |          |          |          |          | $\dashv$ |                |                |
|               | 8                      | _  |                | _  | Ŀ  |   | _            |            |          | _        |        |          | 56       | Щ             |          | _        | _   |          | _ .           | _        | _ _      | 1  |             | 106      |          |          |          |          |          |          |          |                |                |
|               | X                      |  |                | _  |  |   | _            |            |          | <u> </u> |        |          | 57       |               |          | $\perp$  |   |          | _             | _        |          | 1  | L           | 107      |          |          |          |          |          |          |          |                | Ш              |
|               | 8                      |  |                |  |  |   |              |            |          |          |        |          | 58       | L             |          |          |   |          |               | $\perp$  |          | ╛  | L           | 108      |          |          |          |          |          |          |          |                |                |
|               | *                      |  |                |  |  |   |              |            |          |          |        |          | 59       |               |          |          |   |          |               |          |          |    |             | 109      |          |          |          |          |          |          |          |                |                |
|               | 70                     |  |                |  |  |   |              |            |          |          |        |          | 60       |               |          |          |   |          |               |          |          | 1  |             | 110      |          |          |          |          |          |          |          |                |                |
|               | 11                     | Π  |                | Г  |  |   | Г            |            |          |          |        |          | 61       |               |          | П        |   |          | П             |          |          | 7  |             | 111      |          |          |          |          |          |          |          |                |                |
|               | 12                     |  |                |  |  |   |              |            | П        |          |        |          | 62       |               |          | $\neg$   | $\neg$  | T        |               | $\neg$   |          | 1  |             | 112      |          |          |          |          |          |          |          | $\neg$         |                |
|               | 13                     |  |                |  |  | П   |              |            | П        |          |        |          | 63       | П             |          | $\neg$   | $\dashv$  | $\dashv$ | $\top$        | 十        | $\dashv$ | 1  |             | 113      |          | П        | П        |          |          |          |          | $\neg$         |                |
|               | 14                     | $\vdash$   |                |  |  |   | 1            | П          | М        |          |        |          | 64       | П             | $\dashv$ | $\dashv$ | $\dashv$  | _        | $\dashv$      | $\dashv$ | $\dashv$ | 1  |             | 114      |          |          | Н        |          |          |          | $\dashv$ | $\dashv$       | $\sqcap$       |
|               | 15                     |  |                | $\vdash$   |  |   | $\vdash$     |            | Н        | $\vdash$ |        |          | 65       | Н             |          | +        | $\dashv$  | $\dashv$ | $\top$        | $\dashv$ | $\top$   | 1  |             | 115      |          |          |          | _        |          |          |          |                |                |
|               | 16                     | <del>                                     </del> | -              | <del> </del>                                     |  |   |              | $\vdash$   | H        | $\vdash$ |        |          | 66       | Н             | $\dashv$ | $\dashv$ | $\dashv$  | $\dashv$ | $\dashv$      | 十        | $\dashv$ | 1  | $\vdash$    | 116      | _        |          | Н        |          | Н        | $\vdash$ | $\dashv$ | $\dashv$       | $\vdash$       |
| <u> </u>      | 17                     | $\vdash$   | -              | $\vdash$   |  |   | $\vdash$     | $\vdash$   | Н        | _        |        |          | 67       |               |          | +        | $\dashv$  | +        | $\dashv$      | $\dashv$ | $\dashv$ | ┨. | <u> </u>    | 117      |          | -        |          |          |          |          |          |                | $\vdash$       |
| $\vdash$      | 18                     | Η-   |                |  |  | -   | ╁            | $\vdash$   | $\vdash$ | $\vdash$ |        |          | 68       | H             | $\vdash$ | $\dashv$ | +   | +        | +             | +        | +        | +  | <b>—</b>    | 118      | -        | $\vdash$ | $\vdash$ | $\vdash$ | $\vdash$ |          | $\vdash$ | $\dashv$       | $\vdash$       |
| <u> </u>      | 19                     | H  | $\vdash$       | $\vdash$   | -  |   |              |            | $\vdash$ |          | Ò      |          | 69       | H             | -        | +        | +   | +        | +             | +        | +        | ┨  | _           | 119      |          |          |          |          | $\vdash$ | _        | $\dashv$ | $\dashv$       | $\vdash$       |
|               | 20                     | $\vdash$   |                | ⊢  | H  | ٠.  | $\vdash$     |            | $\vdash$ | _        |        |          | 70       | -             |          | -        |   |          | -+            | -        |          | -  |             |          | -        | _        | _        | _        | _        |          | -        | -              |                |
| <u> </u>      |                        | ⊢  | ⊢              | ⊢  | -  | -   |              |            | <u> </u> | _        |        |          |          | L.            |          | -        | +   | +        | +             | -        | _        | 4  |             | 120      | ٧        |          |          | _        | Н        |          | -        | $\dashv$       | $\vdash\vdash$ |
|               | 21                     | <u> </u>   | <u> </u>       |  | _  | _   | <u> </u>     | Ш          | Ш        | _        |        |          | 71       | L.            |          | _        | _   | _        | 4             | 4        |          | 4  |             | 121      |          |          |          |          |          |          |          | _              | Ш              |
|               | 22                     |  |                | _  |  | <u> </u>  | <u> </u>     |            | _        |          |        |          | 72       |               |          | _        | _   | _        | _             | _        | _        | 1  |             | 122      |          |          |          |          |          |          |          | _              | Ш              |
|               | 23                     |  | _              |  |  | $ldsymbol{le}}}}}}$ |              |            |          |          |        |          | 73       |               |          | _        |   |          | _             | _        |          | _  |             | 123      |          |          |          |          |          |          |          |                | Ш              |
|               | 24                     |  |                |  |  |   | L            |            |          |          |        |          | 74       |               |          |          |   | $\perp$  |               |          |          |    |             | 124      |          |          |          |          |          |          |          |                | Ш              |
|               | 25                     | <u> </u>   |                |  |  |   |              |            |          |          |        |          | 75       |               |          |          |   |          |               |          |          |    |             | 125      |          |          |          |          |          |          |          |                |                |
|               | 26                     |  |                |  |  |   |              |            |          |          |        |          | 76       |               |          |          | Т   | П        | Т             | П        |          |    |             | 126      |          |          |          |          |          |          |          |                | $\Box$         |
|               | 27                     |  |                |  |  |   |              |            |          |          |        |          | 77       |               |          |          |   |          | $\neg \vdash$ | П        |          |    |             | 127      |          |          |          |          |          |          |          | $\Box$         | П              |
|               | 28                     |  |                |  |  |   |              |            |          |          |        |          | 78       |               |          | $\neg$   | $\neg$  | $\neg$   | 7             | _        |          | 1  |             | 128      |          |          |          |          |          |          |          | $\neg$         | П              |
|               | 29                     |  | $\vdash$       | Г  | Г  |   |              |            |          |          |        |          | 79       |               |          |          |   |          | T             |          |          | 7  |             | 129      |          | _        |          | _        |          |          |          |                |                |
|               | 30                     |  | $\vdash$       | $\vdash$   | _  | _   | 1            |            | $\vdash$ | _        |        | _        | 80       | _             |          | 7        | 十   | 十        | 十             | 十        |          | -  |             | 130      | -        |          | _        | _        |          |          | $\neg$   | $\dashv$       |                |
|               | 31                     | ├-   | -              | -  | ┢  | $\vdash$  | $\vdash$     |            | -        |          |        |          | 81       | $\vdash$      |          | $\dashv$ | $\dashv$  | $\dashv$ | -+            | 十        |          | -  |             | 131      |          |          |          |          |          |          | H        | $\dashv$       | _              |
|               | 32                     | $\vdash$   |                | -  | <del>                                     </del> | -   | $\vdash$     |            | Н        |          |        | <b>-</b> | 82       | $\vdash$      | $\dashv$ | $\dashv$ | $\dashv$  | $\dashv$ | +             | $\dashv$ | +        | ┨  |             | 132      |          |          |          | -        | $\vdash$ |          | $\vdash$ | -              | Н              |
| <u></u>       | 33                     | $\vdash$   | $\vdash$       |  | ├─   | $\vdash$  | $\vdash$     | $\vdash$   | -        | -        |        |          | 83       | $\vdash$      | -        | $\dashv$ | $\dashv$  | +        | +             | -+       |          | 4  | -           | 133      | -        | _        | $\vdash$ | $\vdash$ | $\vdash$ | $\vdash$ | $\vdash$ |                | $\vdash$       |
| <u> </u>      | 34                     | -  | $\vdash$       | $\vdash$   | $\vdash$   | $\vdash$  | -            | $\vdash$   | Н        |          |        | <u> </u> | 84       | -             |          | $\dashv$ | -   | -+       | +             | +        | +        | ┨  |             | 134      |          | $\vdash$ | Н        | $\vdash$ | Н        |          | $\vdash$ | $\dashv$       | $\vdash$       |
| <del></del>   | 35                     | ├  | $\vdash$       | <del> </del>                                     | $\vdash$   | $\vdash$  | $\vdash$     | $\vdash$   | Н        | -        |        | <u> </u> |          | -             |          | -        | +   | +        |               | -        |          | 4  |             | 134      |          |          | $\vdash$ | -        | Н        | $\vdash$ |          |                | $\vdash\vdash$ |
|               |                        | $\vdash$   | ⊢              | $\vdash$   | $\vdash$   | <u> </u>  | ├—           | $\vdash$   | Н        | _        |        | <u> </u> | 85       | $\vdash$      | $\sqcup$ | $\dashv$ | +   | $\dashv$ | +             | +        | +        | 4  | <u> </u>    |          |          | $\vdash$ | Н        | $\vdash$ | Н        | $\vdash$ | Н        | $\dashv$       | Ш              |
| <u></u>       | 36                     | $\vdash$   | <del>  -</del> | $\vdash$   | <del>                                     </del> | <del>                                     </del>  | $\vdash$     | $\vdash$   | $\vdash$ | _        |        | <u> </u> | 86       | $\vdash$      | $\dashv$ | $\dashv$ | +   | $\dashv$ | +             | $\dashv$ |          | -  |             | 136      |          | _        | Ь.       | Ь.       | Щ        |          |          |                | Ш              |
| <u></u>       | 37                     | <u> </u>   | <u> </u>       | <u> </u>   | <u> </u>   | <u> </u>  | <u> </u>     | $\vdash$   | Щ        | <u> </u> |        |          | 87       | $\vdash$      | _        | _        | _   | $\dashv$ | $\dashv$      | 4        |          | 4  |             | 137      |          | _        | Ш        | Ш        | Щ        |          |          | $\blacksquare$ | Ш              |
| <u> </u>      | 38                     | <u> </u>   | <u> </u>       | <u> </u>   | <u> </u>   | <u> </u>  | <u> </u>     | $\perp$    |          |          |        |          | 88       | $oxed{oxed}$  |          | $\perp$  | $\perp$   | $\perp$  | _             | _        | $\perp$  | 1  | ļ           | 138      |          | Ц.,      |          | <u> </u> |          |          |          |                | Ш              |
| L             | 39                     | <u> </u>   | <u> </u>       | $oxed{oxed}$                                     | L  | <u> </u>  |              |            | Ш        |          |        |          | 89       |               |          | $\perp$  | $\perp$   | _        | _             |          | _        | _  | L           | 139      |          |          |          |          |          |          |          |                | Ш              |
| <u></u>       | 40                     |  | L              | <u>_</u>   | L  |   |              |            |          | _        |        |          | 90       |               |          |          |   |          |               |          |          |    |             | 140      |          |          |          |          |          |          |          |                |                |
|               | 41                     |  |                |  | L  |   |              |            |          |          |        |          | 91       |               |          | $\Box$   | $oldsymbol{oldsymbol{oldsymbol{oldsymbol{\Box}}}$ | $\Box$   | $oxed{J}$     | T        |          | ]  |             | 141      |          |          |          |          |          |          |          |                |                |
|               | 42                     |  |                |  |  |   |              |            |          |          |        |          | 92       |               |          |          |   |          | Т             |          |          | ]  |             | 142      |          |          |          |          |          |          |          |                |                |
|               | 43                     |  |                |  |  |   |              |            |          |          |        |          | 93       |               |          | 丁        | $\exists$   | $\neg$   |               | Т        |          | 1  |             | 143      |          |          |          |          |          |          |          |                |                |
|               | 44                     |  | T              |  |  |   |              |            | П        |          | ]      |          | 94       |               |          | $\neg$   | $\neg$  | $\dashv$ | $\top$        | ╅        | $\neg$   | 7  |             | 144      |          |          |          |          |          |          |          | $\neg$         | П              |
| $\overline{}$ | 45                     |  |                |  |  | _   | ┰            |            | $\vdash$ |          | 1      |          | 95       | _             | $\vdash$ | $\dashv$ | $\dashv$  | $\dashv$ | $\top$        | $\dashv$ | $\dashv$ | 1  |             | 145      |          |          | Н        | М        | Н        |          | $\vdash$ | $\dashv$       | М              |
|               | 46.                    |  |                | Т  |  | $\vdash$  | $\vdash$     |            | Н        |          |        |          | 96       |               | $\dashv$ | 1        | $\dashv$  | $\dashv$ | -             | _        | - -      | 1  | <b></b>     | 146      |          | $\vdash$ | $\vdash$ | -        | Н        |          | $\vdash$ | $\dashv$       | $\vdash$       |
| _             | 47                     | $\vdash$   |                | <del>                                     </del> | $\vdash$   | $\vdash$  | ├            | $\vdash$   | $\vdash$ | $\vdash$ |        |          | 97       | Н             | $\dashv$ | $\dashv$ | $\dashv$  | +        | ╅             | $\dashv$ | $\dashv$ | 1  |             | 147      |          |          | $\vdash$ | $\vdash$ | $\vdash$ | H        | $\vdash$ | $\dashv$       | Н              |
|               | 48                     | $\vdash$   | -              | $\vdash$   |  |   | $\vdash$     | $\vdash$   | Н        | $\vdash$ |        |          | 98       | $\vdash$      | $\dashv$ | -+       | $\dashv$  | $\dashv$ | +             | +        | $\dashv$ | 1  | <del></del> | 148      | $\vdash$ | $\vdash$ | $\vdash$ |          | $\vdash$ | H        | $\vdash$ | $\dashv$       | Н              |
|               | 49                     | $\vdash$   | $\vdash$       | $\vdash$   | $\vdash$   | Н   | <del> </del> | -          | $\vdash$ | _        |        |          | 99       | $\vdash$      | $\dashv$ | -        | +   |          | +             | +        | +        | +  | <u> </u>    | 149      |          |          |          |          | Н        |          | H        |                | Н              |
|               | 50                     | -  | -              | -  | $\vdash$   | $\vdash$  | $\vdash$     | $\vdash$   | ├─┤      |          |        |          | 100      | $\vdash$      | $\vdash$ | -        | -   | $\dashv$ | +             | $\dashv$ | +        | -  |             | 149      |          | H        | Н        | $\vdash$ | Н        | $\vdash$ | -        | $\dashv$       | $\vdash\vdash$ |
|               | υU                     | l  |                | Ī  | 1  | 1   | ı            | i i        | ı 1      |          | 1      | 1        | 100      |               | 1        | - 1      | - 1   |          | - 1           | - 1      | - 1      | 1  | 1           | 150      |          | 1 1      |          | 1        |          |          | . 1      | . 1            | 1 3            |